

ABSTRACT

A windmill apparatus has multiple pairs of blades to enhance power output and lift performance.

A vehicle driven by at least one motor driven propeller has a windmill apparatus with multiple pairs of blades to enhance power output, lift and propulsion. Several clutches are used to engage and disengage the windmill and the motor.

A windmill apparatus has multiple double acting piston/cylinders actuated by the windmill. which additionally has multiple pairs of blades.